

# California **GARDEN**

JULY - AUGUST 1978

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*Fifty Cents*





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## SHOWS

- |                   |  |
|-------------------|--|
| July 1 & 2        | NATSUKO TANAKA presents an exhibit by her pupils in the OHARA SCHOOL OF IKEBANA<br>Majorca Room, Casa del Prado, Balboa Park<br>Saturday & Sunday 11:00 a.m. to 4:30 p.m. Free |
| July 9            | THE SOUTHWEST HEMEROCALLIS SOCIETY presents its SECOND ANNUAL SHOW<br>Majorca Room, Casa del Prado, Balboa Park<br>Sunday 12:00 to 5:00 p.m. Free                              |
| July 16           | CONVAIR GARDEN CLUB presents its DAHLIA SHOW<br>Majorca Room, Casa del Prado, Balboa Park<br>Sunday 1:00 to 5:00 p.m. Free   |
| July 16           | SAN DIEGO COUNTY DAHLIA SOCIETY presents its DAHLIA SPECIMEN SHOW<br>Room 102, Casa del Prado, Balboa Park<br>1:00 to 5:00 p.m. Free   |
| July 29 & 30      | SAN DIEGO GESNERIAD SOCIETY presents its SECOND ANNUAL SHOW<br>Majorca Room, Casa del Prado, Balboa Park<br>Saturday & Sunday 11:00 a.m. to 5:00 p.m. Free                     |
| August 5 & 6      | SAN DIEGO COUNTY DAHLIA SOCIETY presents its ANNUAL SHOW<br>Majorca Room, Casa del Prado, Balboa Park<br>Saturday 2:00 to 5:30 p.m.; Sunday 10:00 a.m. to 5:30 p.m. Free       |
| August 26 & 27    | SAN DIEGO TURTLE & TORTOISE SOCIETY presents its ANNUAL SHOW<br>Majorca Room, Casa del Prado, Balboa Park<br>Saturday & Sunday 10:00 a.m. to 5:00 p.m. Free                    |
| September 16 & 17 | SAN DIEGO BROMELIAD SOCIETY presents its ANNUAL SHOW<br>Majorca Room, Casa del Prado, Balboa Park<br>Saturday & Sunday 11:00 a.m. to 5:00 p.m. Free                            |



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COVER: A drawing of *Brunfelsia calycina* 'Macrantha' by Chrystle Marcus, member of San Diego Floral Association.

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# AN EXOTIC BRUNFELSIA

*Related to Yesterday, Today and Tomorrow*

by Skipper Cope



Photo by Zoological Society of San Diego

WOULD YOU LIKE to have a house plant with dark green foliage and beautiful lavender-purple flowers that usually grow in gorgeous big clusters? With 2½- to 3-inch flowers that bloom for six or more months during the year? Or, if you prefer, will perform in the same exciting manner on a shady patio? Then, look at the exquisite drawing of these flowers on our cover. This is the plant you have been looking for, the *Brunfelsia calycina* 'Macrantha,' now being marketed as Royal Purple!

This is a freely flowering shrub that can be grown in a container. It likes to be pot bound. A self-branching attractive plant that can grow to 4 feet at maturity. But that is not the whole story because it is gorgeous in a hanging basket too. Or you can brighten that shady spot in the garden where so few other

flowers will bloom. Of course, planted in the ground it will probably grow even larger unless you keep it pruned back. One gardener I know of, who has several in his yard, says they bloom almost the year-round. But no one can guarantee that will happen in every garden.

The care is simple. They like a soil rich in compost, kept moist but not wet, and should be fed fish emulsion once a month during the growing and blooming season. Fish emulsion is recommended because this plant requires all the minor elements. (Not all fertilizers include these in their formulas.)

Prune after blooming to shape the plant and to encourage plenty of new growth. It responds well to pruning. Even more flowers will be produced on this new growth the following year.

Royal Purple can take temperatures down to 26 degrees F. without too much damage, but it really would be better to protect it from such cold if possible.

This brunfelsia must have full shade. It will not tolerate any sun, even filtered, either indoors or out, but it does require a well lighted spot when grown indoors. Direct sunlight will cause it to drop its leaves and produce flowers much lighter in shade and very sparse. There is little doubt that you would eventually lose a once gorgeous plant.

They don't seem to attract many pests, which is certainly another big plus in their favor. A good systemic spray will take care of any that might appear. The chances are slim this will happen though, at least this has been my experience.

The brunfelsia is a native of Brazil. Although Royal Purple is related to the smaller well known plant called yesterday, today and tomorrow it is not new. It is just a choice plant that has not been readily available until this year, when a North County grower decided that we have all been deprived of its beauty for much too long. Everyone certainly agrees!

A lovely blooming shade plant that responds so joyously to a minimum of loving care. Who could ask for more? We all salute you Royal Purple! □

# THE JOJOBA

## Promising or Just Promises?

by William L. Nelson

RARELY HAS A PLANT had such extensive news coverage as our local *Simmondsia chinensis*. Also called jojoba (ho-ho-buh) or goat nut, this shrub has aroused international interest due to the wax contained in its seed.

Growing up to 10 feet high and about as wide, the jojoba can be found in many minimum frost areas of southern California, southern Arizona, and northwestern Mexico. Being dioecious, only the female plant produces the nut. When found in the wild, however, the female and male often grow together and appear as one.

The foliage with its oval leathery gray-green leaves about an inch long resembles that of boxwood. The jojoba can make an attractive hedge and is used that way at the Arizona-Sonora Desert Museum near Tucson.

We have grown jojoba at our nursery for about four years now and agree with its many boosters that it is a remarkable plant. To test the reaction to regular irrigation and fertilization, we kept several plants in 5-gallon containers in a section devoted to kiwi fruit vines. Unlike some drought-tolerant plants, the jojoba didn't resent the enriched environment and grew well throughout the year. This makes me feel that modern farming techniques will be usable in its cultivation.

As a boy growing up in Montana, I remember reading the obituary of an old-timer from Yankee Jim's Canyon. He was described as being "one quarter Cherokee and three quarters barbed wire." That's the feeling I have about the jojoba—it's durable, tough, resilient.

When the potential uses for the unique jojoba wax are considered, it is easy to get excited by the jojoba's possibilities as a crop. However, many statements made by some promoters must be challenged.

The following four subject areas concern me most:

1. Jojoba oil will save the Sperm Whale! This exclamation sounds good, but I don't believe it. Substantial production of jojoba oil is at least ten years away and unless heavily subsidized, the projected cost could make it too expensive. At the rate whales are being slaughtered, we must not wait for the jojoba product.

2. Cultivation is described as virtually "problem free." Research in California, Arizona, and Israel shows this notion to be false. If the young plants survive the gauntlet of rodents, rabbits and deer, many insect and fungus problems can await them. Couple this with the other risks taken in any farming operation and you fall far short of the fantasy picture many of the sales brochures portray. Sometimes it sounds as if they are talking about snake oil rather than jojoba oil.

It's "grower beware," and the large corporations and professional growers will be investigating every possible aspect of jojoba culture before they risk very much. I'm worried about the small, inexperienced grower who receives a one-sided view and has minimal horticultural knowledge. His chances for success are not great, I feel. At the very least, the local farm advisor or credible sources with professional desert farm management experience should be consulted before obligations are made.



Author and the 'Paul Thomson' jojoba specimen

3. Seedling jojoba plants are being sold for field planting. If no other method of propagation were possible, this would be understandable. However, superior plants can be propagated by cuttings. The photo above is an example of an outstanding specimen found by Mr. Paul Thomson of Bonsall and named after him. Located near San Ysidro, the plant has an outstanding shape, a rich glaucous color and is a heavy bearer of large nuts. In the lower photo the 'Paul Thomson' cultivar nuts on the left are compared with an average sized nut harvested from a jojoba bush across the road from our nursery. It would be difficult to convince me that I should take my chances with seedlings. I would prefer cuttings from select plants which have known sex and known nut-bearing characteristics.



Paul Thomson cultivar nuts are twice the size of native jojoba nuts

4. It is suggested that "worthless wastelands" can be used for jojoba production. This bothers me a great deal because it could result in haphazard removal of all native plants in many areas unsuited for jojoba. With subsequent abandonment due to failure of jojoba to grow in the area, resulting erosion from wind and rain could be devastating.

I wish that it were possible to slow down the mad rush to plant jojobas. Much more concern is due the horticultural and economic aspects of this crop if it is to be successful. □

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# THE SCARABS OF SUMMER

by DAVID K. FAULKNER  
Department of Entomology  
San Diego Natural History Museum

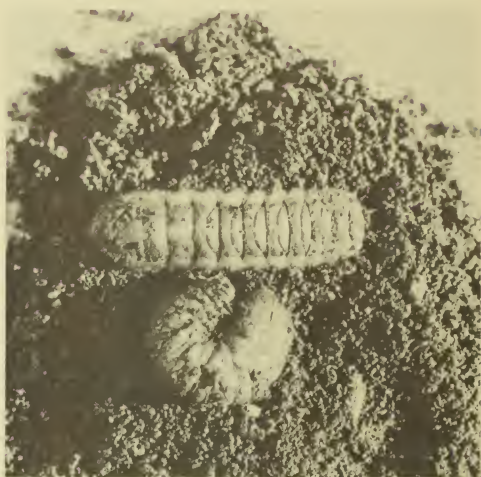
JUNE BUGS, MAY BEETLES, dung beetles, skin beetles, rain beetles, chafers, tumblebugs, figeaters, and dew beetles. Many different names, many different beetles. All, however, are grouped together under one name: Scarab. Although the true scarab beetle refers to the dung beetles in the genus *Canthon*, there are at least 20,000 other recognized species of beetle in the world that are also called scarabs. In fact, North America alone contains over 1,200 unique species of beetle in the family Scarabaeidae. With such a great number of insects to deal with, it is little wonder that many names are used for the same insect.

## ■ A GENERALIZED SCARAB ADULT

The adult scarab beetle is, from the most general view, robust and rounded on the upper surface, with some species being as small as 1/8 of an inch long while other longer species are over 1½ inches long. Coloring is quite variable, but usually ranges from dull browns and grays to brilliant, iridescent greens and blues. An unusual and noticeable structure of these beetles readily separates them from other groups or families. This is the odd pair of antennae possessed by each beetle. These organs, used for gathering chemical cues in the environment, tend to be clubbed at the terminal end. This club is often split and separated into three to seven plates or leaves, called lamellae. The purpose of the plates is to increase the surface area of the antennae, enabling the insect to gather in more molecules that indicate the source of a prospective mate or potential meal. When not in use, the antennae can be collapsed and pulled back against the head into a special groove which provides added protection to the sensitive structures.

## ■ "WHITE-GRUB"

Perhaps the least observed but possibly most important stage of the beetle is the larval stage, commonly called a "white-grub." The grub can live virtually undetected while at the same time causing extensive damage to lawns, fruit trees, shrubs, or vegetable gardens. Lying just below the surface of the soil or in compost, the gray to pearly white grub feeds voraciously on many different kinds of plants, depending on the species of scarab involved.



Larvae, or "white-grubs" of the green figeater beetle. Upper larva, extended, is lying on its back.

## ■ THE LIFE CYCLE

But to really understand the "total" beetle, one must be acquainted with not just the most conspicuous stage, the adult, but rather the entire life cycle or history of the beast.

As with all beetles, the scarabs go through what is termed a "complete" metamorphosis. That is, the insects must pass through four different stages from egg to adult. A typical June beetle of the genus *Phyllophaga* will be used to illustrate the family.

Eggs are laid in the soil by the female beetles from late July through mid-August, usually in areas covered with vegetation. The eggs hatch almost immediately and the first larval stage, or white grub, begins to feed on any available plant material that is suitable for the species. When cooler weather arrives, in late fall, the grubs tend to dig deeper into the soil to escape both the cold and frost, remaining at this depth in a somewhat dormant state for the next three to four months. During this time no feedings take place.

In the spring the ground warms and the again

active grubs dig upward towards the surface where they commence to feed once more. If the species has evolved a one-year life cycle from egg to adult, pupation now takes place. Beginning in early June, the insect changes from a pale white wormlike creature into a heavily armored, winged adult. The adult beetles begin to free themselves from the soil during the first weeks of July. Their emergence is probably triggered by a definite environmental factor such as an increase in the number of daylight hours, increased temperature, moisture, or even some inner clock mechanism. When the adult beetle becomes active, feeding and more importantly, mating takes place and the cycle begins again.

#### ■ JUNE BEETLES

In all probability the most commonly seen of all the scarab beetles are those referred to as June or May beetles. Taxonomically, they are grouped in the genera *Serica*, *Polyphaga*, *Polyphylla*, *Ligrus*, and *Paracotalpa*. From the end of June to the middle of August you will notice the flying adults. They feed



Common striped June beetle, a species of *Polyphylla*, showing the greatly enlarged antennae. There are seven plates, or lamellae, on each antenna.

on pine trees, apple leaves, and a variety of other trees and shrubs, rarely causing much damage. The grubs, however, have been found to feed on the roots of grasses, corn, strawberries, nursery stock, fruit trees, potatoes, and tulip bulbs. One frequently encountered species in California, *Polyphylla decemlineata*, or the ten-lined June beetle, is particularly noticeable around lights during the summer months. With its 1½ inch length and striking longitudinal white bands on the wing-covers, this beetle is seldom overlooked. Its entire life cycle takes three years to complete. The adult beetles are most abundant from early to middle August.

The genus *Serica* contains small, oblong, robust beetles with a brownish iridescence caused by the many small hairs covering the body. This is a large group of beetles with representatives found throughout California. The adults are hidden under logs or rocks during the day, exposing themselves only in the evenings and at night, when they can be found feeding on leaves. They are readily attracted to lights.

One group of scarabs that is more noticeable in the central and northern portions of the state is the rain beetle, genus *Plecocomia*. The common name for the group was derived from the adult male's unique behavior in searching for a mate. Male beetles, coal black in color with long hairs on the body and legs, are known to fly only after the first rains of winter, which usually occur in October or November. The large, reddish-brown and wingless females also mature at this time, dig to the surface of the ground, turn around and reenter the burrow to await the arrival of the males. To assist their winged mates in their search, pheromones, or chemical attractants, are released into the air by the females. The males are able to cue-in on these specific chemicals and thus locate a potential mate. Mating itself occurs in the burrows. After mating, the female lays her eggs in the ground near a food source for the future larvae. Some species of rain beetles take as long as thirteen years to complete their life cycle. During this time the grubs feed underground on the roots of various plants and trees, including apple, cherry, fir, strawberry, and pear. Unlike most other scarabs, the adult beetles do not feed.

#### ■ JAPANESE BEETLE OR FIGEATER

There is growing concern in California that some time in the near future the Japanese beetle, *Popillia japonica*, will be unintentionally introduced



Green figeater beetle, *Cotinus texana*, left;  
Japanese beetle, *Popillia japonica*, right.

into the state and become established, with the potential of becoming a serious pest to home gardens and commercial agriculture. Because of the public's interest in and awareness of this beetle, the relatively unimportant green June beetle or figeater, *Cotinus texana*, is often mistakenly identified as being the voracious pest. However, after close examination, the original similarities disappear. The figeaters appear opaque green from above, coppery to violet beneath, and the wing covers are bordered by yellow-gold markings. The Japanese beetle, on the other hand, is a deep green color with white spots along the sides of the abdomen. Size, though, is the main factor that can be used in separating the two. Figeaters are usually over an inch long while the Japanese beetle is, at the most, a quarter of an inch long.

The life histories of the two beetles differ also. *Cotinus* adults feed on some flowers, but prefer ripening fruit, most often feeding on fruit previously damaged by birds. The larvae feed on lawn grasses and vegetables, and are common in compost piles, feeding on manure or other plant material. The grubs move around by crawling on their backs by means of body ridges. In California these beetles have yet to be considered a serious pest.

The Japanese beetle is another story. On the East Coast, where it was introduced from Japan in

1916 on iris root stock, this beetle has developed into a major pest. The adults and grubs feed on grasses, golf courses, fruits, and shrubbery of all types, roses being a particular favorite. Because of its generalized feeding preference in both the adult and larval stages, it is extremely difficult to control. Hopefully, this beetle will never gain a permanent foothold in California.

#### ■ ENEMIES, REMOVAL AND PREVENTION

Since most of the scarabs in California are natives, the great majority never need to be controlled, their numbers remaining in check by natural enemies, such as birds, rodents, lizards, and more importantly, other insects. Many insects attack and parasitize the grubs and cause the death of the host before it matures into an adult. Certain small wasps, robber flies, and mantidflies are very important in this natural biological control. Besides these animal predators, certain species of fungus have been found to attack and kill the host following ingestion of the spores.

For removal of troublesome grubs from lawns, one proven method is wetting the area in the evening, which results in bringing the larvae to the surface where they can be gathered by hand and destroyed. For the less adventurous individual, V-shaped troughs or flowerpots sunk into the ground with the upper lip flush with the soil surface will prove effective in trapping the grubs. Once caught, the insects can be destroyed directly or fed to any available feathered friends.

If compost piles are in use by the gardener, they should be turned over regularly to expose the defenseless grubs to the always present birds. This is



Chafer beetle, showing the antennal lamellae spread.  
(Cont. on Page 123)

# MY COSTA RICAN CAPER

by Thelma O'Reilly

Adapted from an article that appeared  
in THE BEGONIAN of February 1978.



Thelma O'Reilly happy over finding the elusive tubers of a flame-flowered *Bomarea*

Costa Rica, the source of many fine ornamental plants cultivated in the United States, is a horticultural paradise due to its topographic and climatic diversity. A small country about the size of West Virginia, it is located in a narrow section of Central America between Nicaragua and Panama, yet it ranges from sea level to over 12,000 feet in elevation. Climatic conditions support everything from thorn forest vegetation, the result of several months without rain, to areas of low-land rain forests and cloud forests rich in mosses, ferns, and other epiphytes.

Every minute of my caper was filled with exciting and different experiences, so all I can do is share with you, briefly, the most important highlights.

With few exceptions, days began at 6:00a.m. They were well planned under the guidance of Senor Alphonso Alvarado, a long-time friend of Dr. Mathias, whose softly spoken English words were accompanied with the warmth, friendliness, and cooperation extended by all of the gracious hosts and hostesses who welcomed us into their beautiful gardens and homes.

The first day, which started sunny, quickly turned windy and cloudy. A steady shower was under way before we reached our destination, the well-known Lankester Gardens, now the property of the University of Costa Rica. Here hundreds of tropical plants flourish in a naturalized growing environment, a photographer's delight. Of special interest was the fine collection of epiphytes with emphasis on orchids and bromeliads. Many of the orchids were in bloom and the huge lycaste specimens were an unforgettable sight.

After lunch we visited the University of Costa Rica where we were privileged to have an orientation to Costa Rica by Dr. Rafael Rodriguez, professor of biology. Besides being an internationally known botanist, Dr. Rodriguez is an orchid specialist and an excellent artist. He is currently preparing a series of water colors of Costa Rican orchids, and he allowed us to examine many of the originals.

The next day we viewed the magnificent gold collection and other artifacts at the El Banco Central, visited the Mercado Central, and enjoyed a guided tour of the Natural History Museum.

WEBSTER SAYS, "Caper—a leap, a skip, a spring, as in dancing or mirth." My caper began December 25, 1976 when my husband Tim gave me a Costa Rican Tropical Horticultural Study Tour.

The tour was conducted by UCLA Extension in cooperation with the Organization for Tropical Studies. The most thrilling news was the name of our leader, Dr. Mildred E. Mathias, Professor Emeritus of Botany, Department of Biology, UCLA. The tour included visits to private and public gardens and commercial nurseries. Also it gave us an opportunity to see and collect tropical plant material in its native habitat.

The following morning Senor Alvarado was accompanied by Senora Vera Yglisias, a peppy enthusiastic plant collector and garden clubber whose father-in-law was President of Costa Rica for twelve years. Our first garden visitation, Garden Hacienda Vijahua, the estate of Senora de Roy, was a vision of beauty created by mass plantings of trees, shrubs, vines, and flowers. Most memorable were the tropical paths lined with masses of blooming *Begonia involucrata*, a tall dead citrus tree covered with hundreds of blooming *Cattleya skinneri* plants and a huge, perfect specimen of *B. masoniana*. I found a ground planting of *B. 'Credneri'*, *B. nelumbiifolia*, *B. acuminata*, *B. serratipetala* and white-blooming semperflorens that was very interesting because it was canopied by low branches covered with bromeliads, ferns, and orchids.

La Laguna, the garden of lovely Senora Teron, was built on an old coffee finca\* surrounded by a beautiful mountain vista. As we enjoyed the succulents, orchids, and perennial garden, it was obvious our hostess loved mass plantings. She opened her exquisitely decorated home for viewing while serving delicious refreshments.

The garden of Senora de Monte Alegre surrounded her home which was built at the bottom of a nearly perpendicular hill. The entry into the home was a lush, elegant garden room, complete with pool, statuary, and tropical plants. The beautiful living room opened onto the garden which surrounded a pool of simple elegance. Memorable were the large plantings of rare, stately Honduras pines, graceful native ferns, and the stable of polo ponies.

At 7:00 a.m. on Thursday we departed for a three-day visit to Las Cruces Tropical Botanical Garden. Traveling south over the Inter-American Highway, we reached an elevation of 11,000 feet then dropped to 4,000 feet at Las Cruces Field Station. We arrived after dark, tired and hungry. A delicious meal was followed by an indoctrination to the area by the famous Wilsons, Bob and Catherine, who direct Las Cruces Botanical Garden, which is now owned by the Organization for Tropical Studies. Bob Wilson owned and operated the well known "Fantastic Gardens" in Miami, Florida, until he founded Las Cruces.

The next three days were spent examining and photographing the garden collections of epiphytes, palms, cycads, heliconias, gesneriads, tree ferns, flower-

ing trees, shrubs, vines, begonias, and other horticultural material imported from both old and new world tropics. We did our first collecting in wild areas that were being cleared. I collected seeds from three unidentified begonia species and one climbing begonia that looked similar to *B. glabra*. Cuttings did not survive but all seeds germinated.

I loved Las Cruces and wished we could have spent more time in this horticultural paradise. I hope to return some day for a leisurely visit with the Wilsons and their treasures.

Tuesday we drove to Golfito to see the old United Fruit Company garden. About 200 feet above Golfito, which is at sea level, I saw a lovely unidentified begonia by the roadside. It was in full bloom and, fortunately, I found a few old seed pods which held viable seed.

The two-day drive back to San Jose was spent making many stops to collect plant material and seeds, plus visiting the sphagnum bogs with their endemic puya.



*Begonia metallica*

Thursday morning our group visited Captain Hope's large plant breeding and growing area. This developed into such an interesting visit that it will appear as a separate article. After a visit to a commercial nursery that held many familiar begonias we returned to the hotel to clean plants for their USA entry.

The next day started with a tour of Hacienda Oropesa, a magnificent estate. Hundreds of semperflorens begonias were used in mass plantings in the cultivated gardens. The wild garden was actually a cultivated forest of cypress trees laden with wild epiphytes.

In the afternoon a long mountain drive ended at the finca of gracious and charming Senor and Senora de aguilar. Here, I found an ally; our hostess too loved begonias and they graced her garden and home. Her indoor patio displayed handsome specimens of *B. 'Erythrophylla Helix,' B. serratifolia* and *B. metallica*. What impressed me were the stunning accessories used to complement the begonias, and the emphasis placed on natural growth. *B. metallica*, sitting on a wrought iron stand, cascaded to the floor. I did not see a staked begonia in Costa Rica!

On Saturday morning we visited a lovely old Costa Rican home in downtown San Jose. A walled garden featured hundreds of blooming *Cattleya Skinneri* plants. What a sight to see their roots vining over the white stone walls. A spectacular collection of rare *alocasias* and *anthuriums* drew many raves.

The rest of the day was a race to clean and pack all of the collected and purchased plants. Dr. Mathias handled all the necessary paperwork required to bring our plants out of Costa Rica. She made special arrangements for inspectors to be on hand in Los Angeles when we arrived, because it would be a Sunday. Everything worked like a charm. All plants were released without fumigation within two hours after we landed because we did such a thorough cleaning job.

Costa Rica is more than a tropical paradise. It is a clean and picturesque country with an interesting historical background. The people impressed me with their friendly manner and warm hospitality. I'm certain I'll return to further my horticultural knowledge and renew my friendships with the wonderful Costa Ricans who helped make my tour an unforgettable "caper."

\*finca—an income-producing estate.

## Succulents "Diamonds in the Rough"

by CHUCK CLINE  
Sea World Horticulturist



SUCCULENTS POSSESS BEAUTIFUL FORMS and colors that can be used to advantage in adding interest to our gardens.

Basically stated, a succulent is any plant that stores water in its leaves, stems, or underground parts to help it withstand periods of drought. Many plant families have succulent members, including the *Cactaceae*, *Asteraceae*, *Liliaceae*, *Euphorbiaceae*, *Amaryllidaceae*, *Crassulaceae*, *Aizoaceae*, and others.

Often many gardeners shy away from this group of plants. When viewed in mass plantings, they can be uninteresting and look like a specialty group for collectors only. Aside from the rare or unusual species, most succulents are easily grown and will blend into planters and the home garden when used properly.

Many of the larger agaves, such as *A. attenuata*, and the yuccas, such as *Y. gloriosa*, make excellent accents in a garden or by the doorway. Care must be taken not to use those that have sharp pointed leaves in highly traveled areas or walkways.

The echeverias, senecios (kleinias) and aloes, to mention a few genera, give us a multitude of foliage colors from bronzes and pinks to silver, blue and green



shades, in addition to their often colorful flowers and the wonderfully symmetrical shapes and designs found in their branching and leaves.

One method of decorating a front entrance, a patio, a gate or turn in a garden path, is to use a large, well-designed planter. An immediate effect can be achieved by planting the succulents close together. As these grow together and often over each other, different patterns will develop, adding beauty to the planter. Occasionally an especially vigorous grower will have to be thinned or removed to restore balance to the arrangement. A well placed stone or piece of driftwood can add further interest.

In creating a succulent garden in a container, the plants will show to advantage if the soil is mounded. This is true of most decorative planters. The one problem this presents is how to water thoroughly without having messy washouts. When creating this planter, if pieces of perforated PVC drain pipe are placed in the center (and throughout the planter if it is large), you can then fill these pipes with water and achieve complete penetration.

A mistaken idea is that succulents generally thrive in poor soil, with little or no fertilizer, and grow best in the hot sun. Except for certain specific species, most succulents prefer good garden loam that is adequately watered—good drainage is a must, occasional fertilizing, and some shade, especially during the hottest part of the day.

Today, many of us find ourselves gardening in containers or having to leave our plants for long periods while we work or travel. This is where succulents, and especially the cacti, shine, as they can be temporarily "neglected" for longer periods of time than other types of plants and still be alive and thriving when you re-

turn. If movable, these containers, when placed in the shade, will survive for indefinite periods.

Certain succulents particularly lend themselves to planter bowl arrangements because of their blue and silver coloring: *Sedum dasyphyllum*, *S. spathulifolium* 'Capo Blanco,' *Senecio mandraliscae* (Kleinia), and *S. radicans*, many echeverias and all the dudleyas. Other succulents such as the graptopetalums, echeverias, the small growing aloes, some aeoniums, the crassulas, and sempervivums offer a variety of foliage colors from delicate pearly pink to rose, shades of green and red combinations, to the deep reddish black leaves of the *Aeonium arboreum* 'Folius Purpureis.'

Forms in succulents vary from the upright and semi-upright to the mounding and draping types, plus the entire cactus genus with its hundreds of forms and colorful flowers.



Once you have created one of these miniature gardens and have watched it grow as the plants mature in myriad shapes, geometrical patterns, and subtle coloring, you will become as addicted to their beauty as is the bonsai enthusiast or other plant specialist.

What more personal present could you give for a birthday, anniversary, or for Christmas than something you have created yourself—a present that even the most dedicated black-thumber would have trouble killing? □



Count your garden by the flowers  
Count your years with smiles, not tears  
Count your blessings, not your troubles  
Count your age by friends, not years....

Author Unknown



Photographed from under a nearby outcropping of solid granite is one of the several groups of native palms which grow in Mountain Palm Springs, located in the eastern desert portion of San Diego County. Many of the trees in this group are well over 200 years old; they are the very same trees which were first discovered in 1846 by General Kearney's Army of the West, while it was enroute to San Diego. That was the first sighting of this palm species by Anglo-Americans. Subsequently, this palm was assigned the generic name *Washingtonia*, in honor of George Washington.

## BOTANIC NAMES

by Bill Gunther

SOME FOLKS often say that the Latinized botanic names of plant species are just too difficult to understand. They say "*Why don't you use the common English name for it?*"

The most persuasive answer is that there are just about 250,000 species of flowering plants, and every last one of those species has its own unique Latinized botanic name, but only about 8,000 of them has any English name, common or otherwise. This means that for 96% of all the flowering plant species, we have no English name; we must use the botanic name; there is no alternative.

*"Well then, why not exclusively use the common English name for those 4% of species which do have English names?"*

The most persuasive answer is that in many cases 2 or 20 or 200 different species each have the exact same common English name. Since many different species share the same common English names, the use of common English names alone to identify a particular species is neither definitive nor lucid. Accordingly, the policy of **CALIFORNIA GARDEN** magazine is that whenever there is reference made to a plant species which does have a common English

name, that common English name will be used—but always in association with the botanic name of that species. If the common English name were used alone, it often would be impossible to identify which exact species was being referenced.

With the preceding paragraphs as a preamble, it is understandable why it is important and necessary that anyone who admires and talks about plants should become familiar with the Latinized botanic nomenclature of that special family or genus of plants which happens to be his or her special gardening interest. Without that familiarity with botanic names, one plant enthusiast cannot talk really lucidly to another plant society member about their mutual hobby.

*"Well then, since it is important to do so, what is the easiest and the most fun way to learn those impossible-looking Latinized botanic names?"*

By far the easiest and at the same time the most interesting way to learn botanic names of plant species is to first understand that the Latinized botanic names for plants always mean something; usually they somehow describe the plant species which they identify. The system, then, is to first look up the meaning of the botanic name of the species which attracts your interest, then figure out just how that meaning applies to the particular species which that botanic name identifies, after which, by association, it becomes fun and interesting and relatively easy to remember the botanic name as well as its meaning and the relationship of that meaning to the species which is involved.

Suppose that you like palm trees, and suppose that you are particularly interested in the one and only palm which is native to California. It is the palm which grows in desert canyons in the eastern part of San Diego County; it is the same palm which grows in the canyon near the city of Palm Springs. This American palm is so notable and so outstanding that the German botanist (Wendland) who first described it decided to give it a generic name in honor of the most notable and outstanding American he could think of: George Washington. He 'Latinized' Washington into *Washingtonia*, which became the genus of our native palm. One of the unique characteristics of this palm is that the outer portions of each leaf are laced with many hair-like strands, or filaments. Latinized, filaments becomes *filifera*, the "specific epithet" for this palm. Epithet, as used here, is the second word of a plant's name. The epithet is the part of the

name which distinguishes one plant from another within the genus. The generic name followed by the specific epithet (both words either underlined or printed in italics) together comprise the 'binomial,' or botanic name, for a plant species. Thus the botanic name for our native palm is *Washingtonia filifera*. With an appreciation of the meaning and the significance of the botanic name, it is much easier than otherwise to learn it and memorize it, and it is fun and interesting, to relate that name to the species which it identifies.

Suppose, as another example, that you become interested in the botanic name of the coconut palm. Since the big edible seed of this palm, which we call the coconut, is its most important and noteworthy feature, it is understandable that that portion of the palm would be referenced within the meaning of the botanic name of the species. When early-day Portuguese explorers and navigators returned to Portugal from tropical areas, they brought with them monkeys. In Portuguese, monkeys are *cocos*. These explorers also brought back coconuts, which in color and in shape resembled the head of a monkey. For this reason they too were called *cocos*, and *Cocos* later was taken as the generic name of the palm. In Latin, 'nucifera' means 'nut-bearing,' so *nucifera* was utilized in naming the species. Accordingly, *Cocos nucifera* is the name of the palm which bears nuts which look like monkeys' heads. Again, for knowing its meaning, the name becomes interesting and fun and easy to learn, and by association it becomes simple to relate it to the species which it identifies.

These two examples are typical. The same process can be utilized to study and learn the botanic names of other palms; it can be utilized equally well to study and learn the botanic names of other types of plants. In the publications of every specialized plant society there are articles which provide the derivation of botanic names of plant species within that specialty. In addition, most large public libraries offer a choice of several different books which provide the meanings of generic names and specific epithets of plant species. My personal favorite is Plowden's **A MANUAL OF PLANT NAMES**. If that book is not available in your local library or in your local bookstore, it can be obtained by mail order from The Philosophical Library, 15 East 40th Street, New York, NY 10016.

As a preliminary to the study of botanic  
(Cont. on Page 123)

# Vines I Have Tangled With

## "Lost Among the Garden Trumpets"

by Alice M. Clark

Drawings by Pat Maley



*Beaumontia grandiflora*

VINES NOT ONLY CLING to trellises but often get caught in your heartstrings. Such a one is *Beaumontia grandiflora*, from India. Twenty years ago I planted this herald's trumpet, also called Easter lily vine, on the east side of my La Jolla garden in a raised bed at the foot of a high wooden fence. It took off at once, traveling north along the top of the fence to the corner. Later it went west, over an entrance gate. Eventually it turned north again to pose its arching stems over the door of the two-car garage, where its white trumpets became beautiful accents against the gray cedar wood. Whenever I entered the garden gate the fragrance of this vine greeted me. Its flowering

season began in early summer and continued as long as the weather was warm. I do not live there any longer, but those long ivory tubes backed by handsome 9-inch foliage are part of my dream world.

Another sweet-scented vine, vanilla trumpet, *Distictis laxiflora*, is noted for its long blooming period—March to December. The deep green leaves of this Mexican native look well all year, making a fine background for its clusters of trumpets which open purple and fade to lavender. It is easy to control, likes a cool location, and will cling to rough surfaces.



*Distictis riversii*

*D. 'Riversii'* is a stronger version, with larger leaves and flowers. It is called royal trumpet vine, a tribute per-

haps to its 5-inch purple blooms, marked inside with orange.

There are many trumpet vines among the bignonias, a familiar name we all have long known. Today, partly because of some differences in its climbing apparatus, the genus *Bignonia* is divided into seven tongue-twisting categories. But don't go away - the plants are still their same beautiful selves.

One of my favorites is *Bignonia cherere*, now *Distictis* - not difficult to say and, if you add bué-cin-a-tori-a, it all ripples off the tongue. Relax and call it blood-red trumpet if you wish. When the lovely red trumpets with their orange throats appeared in my lower garden they enhanced its perimeter through the warm part of the year. A vigorous evergreen that will cover a whole roof, it needs to be controlled by pruning. It is highly recommended in Roland Hoyt's **ORNAMENTAL PLANTS FOR SUB-TROPICAL REGIONS**.

The flame vine, *Pryostegia venusta* (née *Bignonia*) is another old-timer that kept its last name. Huge clusters of long, narrow, flute-like tubes flare open at the ends, sometimes. Climbing by tendrils, it hugs sunny walls, blooming through pumpkin time into winter. It can't take frost, but it is not fussy about soil and will do well in the desert. Its foliage is a bit sparse; consider giving it a leafy springtime companion.



*Clytostoma callistegioides*

Once there was a violet trumpet, *Bignonia violacea*. It is now under the extensive canopy of *Clytostoma callistegioides* or painted trumpet. You might still see in June some of the short-tubed lilac flowers that are best from March to May.

Another of the fragmented bignonia clan is called *Anemopaegma*, along with *chamberlaynii*, its

old ending. This lovely yellow trumpet produces flower clusters over 7 inches long, in May and June. You may have missed them this year, but they will bloom again next spring. Yellow trumpet is sometimes confused with the old *Bignonia tweediana*, or cat's claw, now classified as *Macfadyena unguis-cati*.

A top winner in the vine family is *Mandevilla* 'Alice du Pont,' a twining climber with glossy, dark green, opposite leaves. It originated in Longwood Garden in Pennsylvania. Clusters of five flowers opening one by one bloom freely from April to November. Their five pink petals overlap, suggesting a trumpet. It flares wide, disclosing a crimson flush at the base of a yellow throat. For some reason this vine has been hard for me to grow. I lost my first one and my second one sheds its leaves in winter and is very leggy. Now I learn that it must be pinched back early to induce bushiness and you must watch for red spider mites. It likes full sun on the coast where I live and needs rich deep soil. *M.* 'Alice du Pont' is so beautiful that I have purchased another for my third trial. An older, deciduous vine, called Chilean jasmine, is *M. laxa* (*M. suaveolens*), whose white blooms are unbelievably fragrant.

The last of the trumpet forms I will mention is *Pandorea jasminoides* (*Bignonia* or *Tecoma jasminoides*), the bower vine. It is a twining evergreen, with leaves of seven to nine glossy oval leaflets. The bower vine bears short white trumpets with pink throats from June to October. There is also a pure white 'Alba' and a pink 'Rosea.' The flowers are special in that they fall off when spent. Give full sun on the coast, heavy soil, and protection from wind.

*Ampelopsis brevipedunculata*, (and isn't that an exercise for the vocal cords), is best described by its common name, porcelain berry. Dormant until May, it then begins to leaf out and climb very fast, clinging by forked tendrils. I use it for summer lath-house shade. The handsome foliage of three-lobed, short-stemmed, dark green leaves sometimes turns red before falling. Its greatest charm lies in its large clusters of small berries, from September to November. At first the little fruits are a greenish ivory that slowly turns to brilliant metallic blue, with some crimson, before reverting again to white. Their color is so unusual they seem unreal. These vines are pest resistant, sturdy, and stand some drought, once established. (Cont. on Page 123)

# HEDGES

by Sharon Siegan

Photo by San Diego Zoological Society

"A HEDGE IS A METHOD of planting and pruning," explained Ernest Chew, Horticulturist at the San Diego Zoological and Botanical Gardens. "Specifically, it's a matter of selecting your plants and arranging them in a row. Almost any plant is a candidate for a hedge. Pruning determines whether you will have an aesthetically pleasing space divider or a jungle-like growth."

Mr. Chew was pointing out the various hedges as we walked and talked. The reason for planting the hedge will influence selection of plant material. Most

homeowners plant hedges for privacy and protection or to screen out unwelcome sights and visitors and often, wind. A hedge may also serve as a physical and/or visual separation of space, framing grounds or simply marking off driveways, entrances and/or other planted areas.

For Mr. Chew, hedges function in all of these roles, but his major concern is to physically protect the animal inmates and zoo visitors from each other. He calls these hedges "people barriers" because they



*Cistus purpureus* — rockrose hedge

are intended to prevent the public from invading animal territory (and poking a finger or stick into a cage). His hedges also serve to direct traffic along the walkways, discouraging trampling of ground cover and other plantings. A 2- to 3-foot hedge solves both of these problems and this height is also popular with homeowners, particularly in front yard landscaping. High hedges also have their place at the zoo. There's the thick wall of tall podocarpus behind which a maintenance building is skillfully concealed, and the security fence that is delicately entwined with new growth of a bignonia (trumpet vine) trained below the top rows of barbed wire.

Annuals, ground covers, and deciduous plants, for obvious reasons, are seldom considered as hedge material. However, that still leaves an enormously broad choice. Mr. Chew calculated that of the roughly 3,000 different plant species grown on the zoo grounds, about 2,000 can be used for hedges. **SUNSET WESTERN GARDEN BOOK** has pared that list down to about 75 genera, which would be increased several-fold by naming species. Limits are set only by imagination and knowledge of available plants.

Such familiar plants as pittosporum, ficus, or buxus (boxwood) set in a row can make a distinguished hedge; but so can the less common ones—*Metrosideros villosa*, New Zealand Christmas tree, with its showy red blooms, *Calliandra tweedii*, flame bush, or the glossy-leaved *Myrsine africana*, African boxwood.

Ocotillo and prickly pear have been planted as natural security fences by some privacy-minded people. It is not necessary to use the same variety throughout a hedge planting. Mr. Chew has created a delightful patterned look by combining several varieties of escallonia, their slight differences in flower color and leaf shape blending handsomely.

Of course not every plant is potentially suitable for a particular site and purpose. You should begin by analyzing the planting site. Is there sun or shade? What kind of soil and drainage do you have and are you prepared to change it? Are you seeking drought resistance and relative pest immunity in your plants? What is the mini-climate of your site? The answers to these questions will immediately reduce your hedge choices to manageability.

Now look again at your proposed site, studying the architecture and horticulture already present. Do you want to create a formal or casual look? Either

can be achieved with pruning, but certain kinds of plants are better suited to each. And how about permanence? Mr. Chew finds that fast growing, large-leaved hedges tend to become woody after about 5 years of pruning, so that's when he begins replacing them.

Then there is the matter of hedge height. Again, pruning can lower any plant, but it seems preferable to select one whose normal growth approximates your intentions. Thus, Mr. Chew carefully selected *Ilex cornuta* 'Burfordii Nana,' a shiny round-leaved holly, *Viburnum tinus* 'Dwarf,' and *Carissa grandiflora* 'Tuttlei,' a compact variety of Natal plum, because these were all programmed naturally to grow to just about the 3-foot height he desired. 'Nana,' and 'Dwarf' signify short plants, and so may 'Prostrata'—as in the case of *Acacia redolens* 'Prostrata.' Ordinarily prostrata refers to a low ground cover type, but since the acacia is normally a tree, 'Prostrata' describes a mounding plant, reaching about 3 feet at its apex. It creates a series of decorative little hills.

Width is also a consideration. Mr. Chew regretfully decided against Mexican weeping bamboo because, although spectacular, even the zoo could not afford its 20-foot width.

Now we come to pruning. Mr. Chew applies a simple rule of thumb to determine pruning style; small leaved plants are manicured into geometric uniformity, large-leaved ones are left with an open or natural look. Examples of the clipped look were the neatly boxed cotoneaster with its tiny red berries dotting all sides; a lovely silvery-gray, prickly-margined osmanthus, easily mistaken for holly; and two specimen plantings of 5-foot high *Olmediella betschleriana*. These globular Guatemalan hollies have been planted from cuttings to ensure getting only male stock, the female having the disturbing habit of producing inedible orange-sized fruit, hard enough to break a window.

Large-leaved plants such as viburnums and the lush, tropical looking *Dombeya cayeuxii* were allowed to follow their natural form. A beautiful example of this treatment is the *Coprosma repens* 'Variegata' (mirror plant) displaying the full splendor of gold superimposed on its two-tone leaf patterning. Even more spectacular was the *Brunfelsia floribunda*, better known as yesterday, today, and tomorrow. This hedge had been lightly sheared to a loose boxy shape, allowing the magnificent purple, lavender, and white flowers to create a tapestry effect.

Mr. Chew is not always rigorous about following his leaf size criterion. *Raphiolepis*, India hawthorn, with blossoms spilling over a low retaining wall, will probably be allowed to follow its bent, whereas the shearing slated for an escallonia may only be delayed until its flowering period has passed. Then there's the *Pittosporum tobira* clipped to geometric precision, while its relative, *P. undulatum*, is opened to show off the lovely irregularity of the leaves, for which it is named. Pruning is meant to enhance both plant and setting.

Hedges may also provide bonus uses. In the case of the zoo there is the matter of edibility. There, the lories, (a parrot species) collaborate in the pruning of the rockrose, *Cistus purpureus*, pecking off the tender tips as they grow into the cage. Then there is *Syzygium paniculatum*, eugenia, which the grounds-men trim, a small amount at a time, just enough to provide a delectable repast for 11 leaf-eating monkeys who dine also on hisbiscus blossoms. Finally there is the luckless *Aucuba japonica*, gold dust plant, a beautiful gold flecked plant, slowly being sacrificed to the finicky appetite of a Japanese doe, still pining for her homeland. Although her two male companions quickly adjusted to their new surroundings, she refused to eat until the keepers, in desperation, tried aucuba, a native Japanese delicacy. Hopefully, her ration of six stalks daily will soon be cut back or one aucuba hedge is destined for a short life.

Homeowners also can enjoy edible bonuses from their hedges. The fruits of eugenia, strawberry and pineapple guavas, kaffir and Natal plums, to name a few, can all be eaten raw or made up into excellent jellies. Herbs such as rosemary, rue, and even the stiff lemon grass will perform culinary and space divider duty.

Another extra which hedges may confer is scent. *Pittosporum* of the lovely orange blossom aroma, acacia, and carissa all add delightful fragrance while in flower. Wormwood, valued as an herb, appears to deter animals by its pungent scent, although people generally do not find it unpleasing.

As of this writing, 35 to 40 different species are used as hedges on the zoo grounds and while you won't find them all labeled at this time, they will be shortly. These hedges range from moraea, commonly called fortnight lily, to the tall podocarpus. Next time you visit this zoo or any other botanical garden notice the variety of plants used as hedges. □

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CALIFORNIA GARDEN

# THE FIG

## "A Genuine Antique"

by Rosalie García

ghost drawing by BEVERLY KULOT

RELAXING UNDER THE SHADE of one's own fig tree in the hot lands of Biblical times was a rich pleasure that even the poor could enjoy. *Ficus carica*, native to Turkey and Asia Minor, was adapted quickly to domestication in most warm climates. Although it was downgraded because of its ease of culture and use by the peasants it found its way into the gardens of the very rich in Rome. They made a gourmet dessert of figs marinated in wine, then dressed with cream.

The English appreciated figs for their ornamental and food value. However, they had to grow theirs in greenhouses.

Americans seem to react to figs as they do to cats: They adore them or can't stand them. Newcomers to California often have never even seen a fig and are not about to try one. Others are much like the little boy in my neighborhood who is a self-appointed informer on the other kids who raid my fruit trees, but expects generous rewards of fresh fruit. Once when I had nothing to offer except ripe figs, I asked him if he liked them. Without enthusiasm he replied, "I'll eat 'em."

Birds do not discriminate against figs; they revel in them. Once during an illness, I watched a persistent little red-breasted finch who made shells of all the figs at the top of a tree outside my window. In one really big 'Kadota' he buried himself so deeply that all I could see was the tip of his quivering little tail. Suddenly he plopped to the ground like a solid ball. Fearing a cat would get to him, I rushed out and picked him up. He was so completely covered with the sticky fig juice that he couldn't move. I washed him off, patted him dry, and laid him down. He

flew off, but by the time I was back in bed he was head first into that fig again.

Figs are rich in food value. When it is dead ripe, with cracks in the skin and a drop of honey at the tip, a fig is pure ambrosia. One fig has around 100 calories; add a slice of good cheese and one has a meal. The fig contains vitamins A and C as well as minerals and it is a good digestive regulator. In Mexico I have seen babies reveling in the soft sweetness of figs, with juicy pulp all over their hands and faces.

Because North Americans do not relish figs as they do stone and citrus fruits, figs are not a big commercial crop. Being among the most perishable of fruits, only those with the toughest skins and poorest flavor appear in our markets. South Texas and the hot California valleys produce the dried and candied figs of commerce, as well as some of the canned product.

Figs came to California from Spain by way of Mexico. The Mission Fathers brought cuttings and began growing figs soon after their arrival. 'Black Mission,' a longish black fig with red pulp, has adapted well to California's inland valleys and coastal areas.

Although the fig is a deciduous tree some kinds withstand temperatures down to 10 degrees F, if protected by a wall or wrapped in winter. Several varieties will grow in Oregon, but the fruit seldom ripens. In southern Arkansas we had a fig tree that survived hard freezes. After the freeze we would cut it to the ground and it always came up again, reaching a height of 20 feet in the warmer years. It also had an ambitious root system which found its way into our cistern 40 feet away. We called it simply, "the fig."

Some gardeners put figs in a class with geraniums because they grow too easily to be a challenge. One friend of mine who loves both figs and cats brought some cuttings from her former home in Texas. Since I have a weakness of never turning down any plant I accepted her gift of a rooted fig. Promptly at home I was confronted with, "Where are you going to put it?" Since I had no immediate answer, I left it by a back wall where it got knocked about by cats and dogs for several months. Then one day my husband noticed that the sticks had tiny buttons—miniature figs. Admiration for such capacity for survival so overwhelmed him that he planted the little fig tree beside the arbor.

I have since espaliered it along the framework of the arbor but regret to say it has not done well. Cool west winds from the ocean keep it chilled. In Texas this fig is called 'Magnolia.' It is a light brown fruit with very sweet strawberry red pulp. Sunset Western Garden Book recommends it for our hot areas and calls it 'Texas Everbearing.' I gave a rooted cutting to my friend Loretta Crocker who lives several miles inland. She planted it near a shed and tells me that it produces abundant crops of figs so large that five of them cover a dinner plate.

Getting fig trees started is easy. In spring take tip cuttings of new wood, set them in pots or in the ground, and keep them moist. Within a year they will be firmly rooted. In the second year they will produce a few figs. Remove these, and by the third year, one can have a small tree and a fairly large crop. Layering a low limb is a sure way of propagating, and will produce a better root system more quickly. A fig tree can grow to 30 feet unless pruned. In commercial orchards, figs are pruned heavily, but the home gardener interested in shade and appearance can be more selective and still have all the figs he wants. Fig trees are decorative even when dormant, with their soft gray bark and stout twigs tipped with pointed green buds. These buds open into strongly veined, bright green leaves. In tubs, even cuttings will produce attractive plants that bear fruit. They require more water and fertilizer than they would in the ground. Frequent repotting and root trimming will keep them in bounds.

Does a fig bloom? Yes. What we eat is an "inside out" flower cluster. Inside the skin of the fruit are hundreds of tiny flowers and seeds which we think of as the flesh or pulp. Pollination of these

flowers take place through a small opening at the apex of the fruit and is accomplished mostly by the fig wasp, *Blastophaga*. This insect is so small one seldom sees it, but it does the work. If it doesn't, the fig shrivels and drops off when it is about an inch long. In commercial fig orchards pollen from wild figs is often used as an aid in pollination. The 'Adriatic' is self-pollinating.

Figs are all tropical in origin and nature, but centuries of selection and breeding have produced many figs that will grow in temperate zones. They vary in skin color through black, brown, green, white, and lavender. The pulp may be red, yellow, white, pink, or purple. They vary also in size, much depending on temperature and culture.

Aficionados of figs delight in going out in the cool of the morning and picking figs for breakfast. When a fig is drooping on its stem with a drop of honey at the tip, and the skin has tiny cracks, that is the time to cut it with a sharp knife, or twist it off near the twig. Being careful not to bruise, lay it in the bottom of your basket and take to the breakfast table. Slice with the skin on (if it is tender) and pour cream on it. Now relish one of the fruits loved as long as people have pampered their taste buds.

The following list is compiled with the help of Sunset Western Garden Book:

#### BLACK SKIN MOSTLY RED PULP

'Black Mission.' Not recommended for the coast, but it does well in my garden.

'Negronne,' sometimes called the French fig. Small fruit.

'Granata,' Persian fig. Tender skin, large silky leaves.

#### BROWN SKIN

'Brown Turkey.' Pink or red pulp and thick skin. Very large, not too sweet variety most often seen in markets as fresh figs.

'Neveralla.' Very sweet, late variety.

'Osborn Prolific.' Stubby, not so sweet, hardy, makes a big tree, grows fast. Common in this area, especially in poorly attended gardens.

'Texas Everbearing.' Hardy, bears early. Mahogany skin with strawberry-colored flesh.

#### GREEN SKIN

'Kadota.' Tough skin, purple or yellow pulp. Used for canning and market sale. Does well in my garden, but subject to damp fungus rot.

'Adriatic.' Red pulp, hardy, coast or inland valleys.

'Desert King.' White or violet-pink pulp. Early, hardy.

#### WHITE SKIN

'Conadria.' Thin skin, blushed violet, white to red flesh. Best in hot areas.

'Genoa' ('White Genoa'). Really sort of greenish-yellow, good garden variety, makes a pretty tree, grows both coast and valleys.

'Latterula,' White Italian Honey. Sweet, shaped like the 'Black Mission.' Hardy but somewhat rare, makes two crops in hot weather.

'Blue Celeste.' Skin bronzy lavender, pulp rosy-amber. Small very sweet, and dries well on tree in California.

# CITRUS TREES

by George James

Photo by Bill Gunther

CITRUS TREES have the decided advantage of being ornamental and at the same time contributing to the family's diet. They have attractive foliage all year long and sweet scented flowers followed by brightly colored fruit.

## • TYPES OF CITRUS TREES

Citrus may be bought as standards or dwarfs. The standards will grow to be between 15 to 30 feet in both height and spread. Dwarf trees are from 4 to 10 feet in height and spread and when allowed to grow naturally are bushlike. The size of the tree in no way influences the size of the fruit. Dwarfs are suitable for and are frequently grown in containers where their size is reduced because their root development is restricted. They are recommended for training as espaliers, some varieties being better for this than others. Some dwarfs, especially the kumquat and the calamondin, are attractive container plants because of their dense habit of growth and large crops of attractive fruit that remains on the plant a long time.

All kinds of citrus require sun most of the day to grow well and bear good quality fruit. To produce the best quality some varieties need a great deal of heat, such as is found in the desert. Others bear their best fruit in the cool coastal areas. There is a difference in the cold hardiness of varieties, but in all cases the plant will stand several more degrees of cold than the fruit. In areas that have high summer heat and winter frost, varieties can be selected whose fruit will mature by the end of the year and can be picked before the frost. Navel oranges and marsh grapefruit are two that are suitable.

## • IRRIGATING

Controlling the water supply is indeed important. All citrus need a soil that drains quickly; if the soil in the root zone stays wet too long the roots will be damaged. On trees with "wet feet" new shoots die back and there is excessive leaf drop. When it is known that the soil in which citrus is to be planted does not drain well, adequate drainage can be created by putting good soil in a raised bed. Excess water will then drain on to the surface of the garden soil. Shallow rooted plants that require frequent watering



A redwood planter-box, only eighteen inches square by top dimension, gives perspective to the truly diminutive size of the DWARF ORANGE TREE which - in full bloom - is growing in it.

(lawns, ground covers, annuals, etc.) should not be planted under the spread of the branches of a citrus tree. The irrigating they need would keep the soil too wet for the citrus. Mature citrus trees can be found growing in a clay or other poorly drained soil, but these trees have been watered very carefully so the soil has not stayed wet too long. If basins are used to irrigate trees growing in poorly drained soil they should be leveled before the winter rains so the surface water does not collect around the trees and damage the roots.

Proper irrigation consists of enough water to meet the needs of the tree without keeping the soil too wet for a long period of time. During the first year newly planted trees need watering once a week or twice when the weather is hot and dry. As the tree grows it needs less frequent watering, but the amount of water should be increased so a larger area of soil is wet. This encourages the roots to spread farther and deeper. Mature trees growing in the ground can be watered at intervals of 3 to 6 weeks during the warmest months of the year, less frequently when it is cooler, depending on the kind of soil and the tem-

perature. It is wise to ascertain the moisture content of the soil in the root zone by testing with a probe or by digging with a shovel and to apply water only when the soil is getting dry. There have been recommendations that citrus should not be watered until they start to wilt, but it is damaging to the tree to be allowed to become this dry. Enough water should be applied at each irrigation to wet the soil to the depth roots have developed. In soils that are known to drain slowly, the danger of overwatering can be reduced if only one-half of the area covered by the branches is watered, the other half being watered a week or so later.

No matter which method is used to water—basin, sprinkler, or drip—the area within 6 inches of the trunk should be kept as dry as possible to discourage development of brown rot gummosis. This disease may girdle the trunk and kill the tree if unchecked. Gummosis causes the bark to scale and fall off, and a liquid exudes from the infected area. Examine trees periodically for indications of this injury. If it is found, the infected areas should be scraped and painted with a paste made of bordeaux powder mixed with water. Following the scraping, if liquid still exudes, these spots should be rescraped and retreated with the paste until there is no more scaling or exuding.

A mulch should be applied as soon as a tree is planted and renewed as it breaks down, so that a layer of material no less than 2 inches in depth is under the tree at all times. A mulch will save water, discourage weeds, and help to accumulate harmful salts from irrigation water so that they won't damage the roots. Any organic matter that is not harmful to plant life can be used as a mulch. Inorganic materials such as stones, roofing paper, or plastic sheeting can be used instead.

#### • FERTILIZING

If fertilizer is used the rate of growth of young trees is increased and the appearance and productivity of older ones improved. All fertilizer should be applied to moist ground and watered in. Three applications of commercial fertilizer, late winter, another in midsummer, and the last one by the first of September have proven effective. Nitrogen is the element most needed. Ammonium sulphate or any other high nitrogen fertilizer may be used for two of the applications and citrus and avocado food or an all purpose fertilizer for the third, to supply the phosphorus and potash required. If your all purpose fertilizer contains minor elements there is little danger

of iron or zinc chlorosis. Iron deficiency is manifested by new leaves that are yellow between green veins. This condition may be corrected by the application of iron chelate or iron sulphate according to directions of the manufacturer. Zinc shortage is indicated by yellow blotches or mottling of the green leaves. This condition can be corrected with a product that is mixed with water and sprayed on the leaves. Excesses of iron or zinc cause a problem that is as serious as the shortage. The use of too much fertilizer can cause excessive growth and poor quality fruit. It is wise to follow the instructions on the package labels for the amount to apply according to the size of the tree.

#### • PRUNING

Citrus can be pruned at any time; it is nearly impossible to find a time when a tree doesn't have flowers and/or fruit on it. Citrus need a little pruning to remove low branches whose fruit would lie on the ground, to remove dead wood and weak growth in the interior of the tree, or to remove strong shoots that grow beyond the outline of the tree. When necessary to keep the tree in bounds the top or sides may be cut to shape the general outline. When interior branches are exposed to the sun they should be painted with whitewash or water base latex paint to protect the bark.

#### • FRUITING

There are several things that happen to citrus that an inexperienced grower should know. "June drop" is the name given to a sudden shedding of small fruit about midyear, a natural behavior, which is the tree's way of adjusting the size of the crop to its ability to produce good fruit. Such a drop is made more severe if the weather is hotter than usual or if the soil is too dry. (In fact these conditions can cause fruit to drop at any time.) Fruit may split and fall from the tree, the result of too much water. There is no need to thin fruit unless you think the clusters will break the branches when they mature.

Unlike deciduous fruits, the fruit of citrus can be left on the tree after they have ripened, then harvested as needed. Orange and grapefruit trees have one main crop of bloom and a few off season blooms each year. As a result of this habit of growth most of the fruit ripens at about the same time. Some types have more than one main crop of flowers, with stragglers in between, producing some mature fruit at any season. This is another of the advantages of citrus for the home gardener. □

To supplement this information there are two reliable references that may be consulted: *The Sunset Western Garden Book*, Lane Publishing Co. and *All About Growing Fruits and Berries*, Ortho Book Division.

# THE MINIATURE SINNINGIAS

by Ann Shore

Drawing by Marj Mastro



*Sinningia speciosa*—gloxinia

MINIATURE SINNINGIAS, members of the family Gesneriaceae, will drive away your house plant blues.

Everyone is familiar with and grows charlies, spiders, dieffenbachias, scheffleras, palms, philodendrons, dracaenas, and obvious terrarium plants, most of which should never be confined, but isn't it time to acquaint ourselves with the unusual, the choice, albeit easy to grow, miniature sinningias? Why not step into a real miniature adventure with 'Dollbaby,' 'Krishna,' 'Little Bugler,' 'Cindy,' 'Freckles,' 'White Sprite,' 'Snowflake,' 'Tinkerbells,' 'Foxy Blue,' 'Stuck Up,' and the species *Sinningia pusilla* and *S. concinna*, all tuberous plants with heart-shaped leaves.

There are more than fifteen sinningia species, native to Brazil, ranging in size from the very miniature pusilla with quarter-inch leaves and a pebble-sized tuber to tubiflora with five inch leaves and a large sized tuber. In using *S. pusilla* and *S. concinna* as parents, hybridizers have brought forth many cultivars, crossing and re-crossing one or the other parent with other species, thus a whole new world of miniatures has evolved.

These cultivars perch happily on a shelf given plenty of light (no direct sun, please). In a terrarium or bubble, they can become a true miniature garden, a tropical jungle replete with miniature ferns and mosses—add a tiny ceramic creature and step into a delightful elfin world.

*S. pusilla* and *S. concinna* are the smallest. The entire plant rarely exceeds a width of two inches, a low growing rosette shape, tiny, tiny, blossoms on a one and a half inch stem. These two must be grown in a bubble or terrarium covered with plastic or glass since high humidity and low light intensity is a requirement.

*S. concinna* has small tubular lavender flowers with a purple spotted white throat; *S. pusilla*, on the other hand, has lavender flowers. In a terrarium they seldom need watering and are almost everblooming.

Occasionally, a plant may go into forced dormancy due to a lack of humidity or an environmental problem. One assumes, that's it for this plant, chuck it out! But here, wait a minute, these little ones are sturdy; underneath that minute rosette of leaves is a reservoir, a very small tuber, remember? It is renewing itself, soon you will observe tiny new leaves emerging, promising another profusion of bloom.

These precious plants are easily propagated from tiny dust-like seeds which must be planted quickly as they lose their viability within three weeks. Germination often occurs in two days! As the leaves continue to enlarge you know there is a little tuber forming under the soil, unbelievably wee. Can you imagine propagating a miniature sinningia from a leaf? Incredible, because the leaf is the size of a small fingernail! It takes time but it does form a tuber; now that is dedicated gardening.

Plants are available, most probably at a specialist nursery, but isn't it fun to go nursery hopping? There is no end to the treasures you may find. □

### *A Gardener's Experience*

A GRAPEFRUIT TREE planted within 10 feet of a neighbor's house had been properly watered and fertilized and it had produced year after year a good crop of small, sour, and bitter fruit.

Then the neighbor installed an air conditioning unit in a nearby window. All the warm air from the air conditioner blew onto the grapefruit tree. To everyone's amazement, every year since then the fruit has been larger, juicier, and sweeter as good grapefruit should be.

—A.M.

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*He is happiest who hath power  
To gather wisdom from a flower...*

*He that follows nature is never  
Out of way...*

*Bloom where you are planted...*



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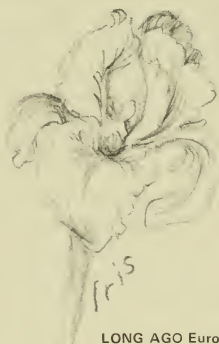
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LONG AGO European parents cultivated the Bearded Iris because the roots were a cure for ulcers, acne, or a loose tooth. Men chewed iris root to remove smells of garlic and tobacco. Today Orrisroot is still used in perfumes and for flavoring.

# ★ SCARABS

(Cont. from Page 105)

an especially good control method for the larvae of figeaters and skin beetles in the genus *Trox*. It is only when these methods have been exhausted and severe damage is occurring that chemical control should be resorted to. If chemical sprays are used as control measures, care should always be taken in choosing the pesticide and in its handling.

## ■ THEY WERE HERE FIRST

As mentioned earlier, almost all scarab beetles occurring in California are native, few being introductions from elsewhere in the world. Because of this, local scarabs have depended in the past on their native plant hosts. These relationships, usually in balance with one another, were disrupted when people began to radically modify the existing habitats. The changes are not necessarily wrong or bad, but different. In direct response to this, many insects have been given a choice of other related plants on which to feed. That is, plants introduced into the area for food or ornamentation. These botanicals are considered to act as alternate food sources for the beetles. An example of this would be with the brown June beetles, genus *Serica*. Originally their hosts were manzanita, oak, ceanothus, and lupines. However, now they are known as pests on avocado, peach, plum, and other fruit trees.

Scarab beetles play an important role in the overall ecology of this region. Many beetles feed on plants that are considered to be "weeds" and keep them under control. Numerous birds and mammals depend on scarabs, particularly the larvae, for a major portion of their diets. Most of the bothersome beetles can be controlled if they are causing damage to plants. The majority of this group of beetles, though, should just be enjoyed for their uniqueness and beauty. □

# ★ VINES

(Cont. from Page 113)

To see them is to want them, but nurseries do not stock them. However, they come easily from seed.

These are a few of the vines I have tangled with and come to love over the years. Why not try a few of them and you too will be rewarded with their beauty and fragrance. □

# ★ BOTANIC

(Cont. from Page 111)

names, the beginner should realize and remember well that there is a botanic name for every plant species, but not for any of the thousands and thousands of hybrid garden varieties which have been derived from crossing and mixing various different species over the course of many generations. These are called cultivars.\*

The very special reward for learning the botanic nomenclature of a species is to know that plant better, to enjoy and appreciate it more, and to be able to discuss it with other plant enthusiasts more lucidly than otherwise. Happy studying! □

\*See next issue for more on cultivars.

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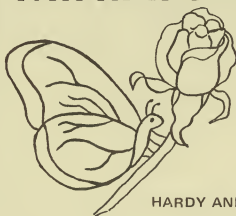
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# now is the time

compiled by PENNY BUNKER

## BEGONIAS Margaret Lee

- ✓ to check for mildew—spray at once to control.
- ✓ to repot if needed to the next size.
- ✓ to make cuttings of material removed in grooming.
- ✓ to feed tuberous begonias with "Hi-Bloom" and fish emulsion.
- ✓ to check for insects, snails, slugs, and fungus.

## BONSAI Herbert Markowitz

- ✓ to keep bonsai damp—warm days require they be watered several times a day if the weather is hot and dry.
- ✓ to move some trees so they get only half day sun.
- ✓ to check for insects and pests; spray with diluted spray.
- ✓ to mist or spray foliage of certain bonsai in the evening or early morning.

## BROMELIADS Dr. Norman Lurie

- ✓ to continue feeding plants; generally with half-strength.
- ✓ to remove and pot offset to increase plants.
- ✓ to water frequently and keep cups clean.
- ✓ to maintain insect and snail control program.
- ✓ to keep the tender plants protected from hot sun.

## CACTUS & SUCCULENTS Verna Pasek

- ✓ to do regular watering, soaking the soil rather than sprinkling plants. Water spots can damage during hot muggy days.
- ✓ to continue feeding with high-potash, high-phosphorus food to stimulate root growth and blooms.
- ✓ to protect against slugs and snails.
- ✓ to repot those pot-bound plants.
- ✓ to move some plants into shady areas to protect from scorching sun.

## CAMELLIAS Les Baskerville

- ✓ to water frequently during hot weather. Never let a root zone completely dry out.
- ✓ to use a redwood compost an inch thick for mulching.
- ✓ to feed with liquid fish, cottonseed meal, or other camellia fertilizers. Feed in April, again on Memorial Day, and again on Fourth of July.
- ✓ to inspect for aphids or loopers; spray with malathion.
- ✓ to continue light pruning of any unwanted branches.
- ✓ to stake up long new growth.
- ✓ to give plants iron three times a year.

## DAHLIAS Abe Janzen

- ✓ to continue regular watering program.
- ✓ to tie up canes to prevent plants breaking; use one loop for each cane.
- ✓ to dis-bud to encourage better bloom.
- ✓ to spray for insects and mildew. Keep snails and slugs away.
- ✓ to feed with 5-10-10 to promote bloom and root growth.
- ✓ to keep old blooms cut back to first set of leaves from main stalk to prolong blooming.

## EPIPHYLLUMS Mary & Warren Kelly

- ✓ to start new cuttings during the warm weather.
- ✓ to keep plants out of full sun—need filtered sunlight with free air movement.
- ✓ to watch moisture—spray misting is beneficial during hot, dry days, but spray during evening.
- ✓ to repot plants that have outgrown their containers.
- ✓ to fertilize for new growth—use 10-10-15 at this time.
- ✓ to watch for pests—spray or drench plant with "Cygon" to control.

## FERNS Ray Sodomka

- ✓ to fertilize plants regularly as they are at growing period. Use a high-nitrogen fertilizer.
- ✓ to water and maintain humidity by dampening surrounding areas.
- ✓ to trim dead fronds.
- ✓ to spray for aphids, and control scale and snails.
- ✓ to check that hot sun is not breaking through saran or lath.

## FUCHSIAS William Selby

- ✓ to spray for insects or can drench plants with "Cygon" for systemic control.
- ✓ to fertilize with high-phosphorous for buds and blooms.
- ✓ to mist often during those hot dry days. Water in the cool of the evening and not during middle of the day.
- ✓ to watch not to OVER-water; more plants are lost from too much water.
- ✓ to keep spent blooms and seed-pods picked off for more and larger blooms.
- ✓ to prune lightly to shape, especially after blooming. Will encourage blooms for fall.

## GERANIUMS Carol Roller

- ✓ to water as needed—allowing plants to dry out somewhat between waterings, but not completely dry and wilted.
- ✓ to continue feeding using a balanced fertilizer at half the recommended strength.
- ✓ to continue an insect and pest control using materials according to directions.
- ✓ to remove faded flowers, discolored leaves, and any unshapely growth.
- ✓ to rotate plants on a schedule to produce well-shaped plants.
- ✓ to protect regals (Martha Washington types) and other sensitive kinds from intense heat and sun by providing shade.

## IRIS Rose Fernly

- ✓ to divide and replant bearded iris; discard old spent rhizome.
- ✓ to dust the ends of the iris with sulphur.
- ✓ to dig and revitalize the soil for planting; dig in humus, bone meal.
- ✓ to feed those plants left in ground with a high-nitrogen fertilizer this one time only.
- ✓ to cut off foliage of beardless iris, but do not dig until Sept.
- ✓ to watch for aphids and use a light insecticide or a systemic.
- ✓ to keep iris beds clean and free of old fans and weeds.

## ORCHIDS Charles Fouquette

- ✓ to continue watering cymbidiums heavily.
- ✓ to feed high-nitrogen fertilizer to cymbidiums and cattleyas (these are the growing months).
- ✓ to feed ½ strength complete fertilizer (18-18-18) to phals and cattleya seedlings.
- ✓ to keep outdoor planter mixes moist.
- ✓ to check light intensity in glass houses—they may need shading.
- ✓ to spray and mist on hot, dry days. Be aware of Santa Ana days.
- ✓ to maintain regular program against pests—watch for red spider, scale and/or snails.

## ROSES Dr. Robert Linck

- ✓ to water heavily to promote summer growth.
- ✓ to continue feeding your bushes every four or six weeks.
- ✓ to watch for rust and eradicate it; remove infected foliage and spray with "Act-Dionne PM."
- ✓ to watch for spider mites and spray them off.
- ✓ to do a late August moderate pruning for abundant fall bloom.

## VEGETABLES George James

- ✓ to prepare soil and make full planting of tomato plants, peppers, and eggplants.
- ✓ to plant seeds of snap beans, summer squash, cucumber, corn, and lettuce.
- ✓ to irrigate deeply instead of light sprinklings, to save water and labor.

## GREEN THUMB ITEMS Fern Rosely

- ✓ to feed lawns and dionchandra.
- ✓ to make sure lawns are wet after watering—check depth of moisture into soil—deep watering most important.
- ✓ to plant flowers for fall color—especially marigolds, zinnias, stock, calendulas in August.
- ✓ to plant or divide Shasta daisies.
- ✓ to prepare soil for September, October plantings.
- ✓ to pinch back chrysanthemums once again.
- ✓ to feed azaleas—apply iron chelates if needed.
- ✓ to move or take divisions of birds-of-paradise. Move to a sunny location with excellent drainage and acid soil. Cottonseed meal can be fed year round.
- ✓ to cut back berry bushes after harvesting; cut back all canes that carried this season's fruit.
- ✓ to move or divide belladonna lilies after they have bloomed.

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### SAN DIEGO BROMELIAD SOCIETY

1st Thurs., United Church of Christ,  
5940 Kelton, La Mesa, 7:30 p.m.  
Pres: Mrs. Vincent Lang 469-2323

9160 Lemon Ave., La Mesa 92041

### SAN DIEGO CACTUS & SUCCULENT SOC.

2nd Sat., Casa del Prado, 1:30 p.m.  
Pres: Mr. H. Warren Buckner 469-1391  
1744 Engelwood Dr., Lemon Grove 92045

### SAN DIEGO CAMELLIA SOCIETY

3rd Wed., Casa del Prado, 7:30 p.m.  
Pres: Mr. Les Baskerville 583-4539  
4871 Lucille Pl., S.D. 92115

### SAN DIEGO CHAPTER

### CALIFORNIA NATIVE PLANT SOCIETY

4th Wed., Casa del Prado, 7:30 p.m.  
Pres: Mr. Robert Nicholson 443-2998  
13003 Wildcat Canyon Rd, Lakeside 92040

### SAN DIEGO COUNTY DAHLIA SOCIETY

4th Tues., Casa del Prado, 7:30 p.m.  
Pres: Mr. Gerald Lohmann 279-5135  
6616 Rockglen Ave., S.D. 92111

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 1602 Svea Ct., Lemon Grove 92045

**SAN DIEGO COUNTY WILDLIFE FED.**

Pres: Mr. Robert Fusco 447-3369  
 2726 Willow Glen Dr., El Cajon 92020

**SAN DIEGO EPIPHYLLUM SOCIETY**

2nd Wed., Casa del Prado, 7:30 p.m.  
 Pres: Mr. Eugene Lund 469-1677  
 5666 Aztec Dr., La Mesa 92041

**SAN DIEGO FUCHSIA & SHADE****PLANT CLUB**

2nd Mon., Casa del Prado, 7:30 p.m.  
 Pres: Mr. George S. Szobar 276-1559  
 4310 Cessna St., S.D. 92117

**SAN DIEGO GERANIUM SOCIETY**

2nd Tues., Casa del Prado, 7:30 p.m.  
 Pres: Mrs. Carol Roller 444-7745  
 1134 Nidrah St., El Cajon 92020

**SAN DIEGO GESNERIAD SOCIETY**

1st Thurs., Casa del Prado, Rm 104, 7:30pm  
 Pres: Mr. Ben Hardy 448-0659  
 9443 E. Heaney Cir., Santee 92071

**SAN DIEGO-IMPERIAL COUNTIES****IRIS SOCIETY**

3rd Sun., Casa del Prado, 11:00 a.m.  
 Pres: Mrs. Paul Runde 281-4835  
 4670 Twain Ave., S.D. 92120

**SAN DIEGO ROSE SOCIETY**

3rd Mon., Casa del Prado, 7:30 p.m.  
 Pres: Mr. Robert Linck 274-5929  
 1935 Bahia Way, La Jolla 92037

**SAN DIEGUITO BRANCH****AMERICAN FUCHSIA SOCIETY**

Pres: Mrs. Noreen Bryce 724-8676  
 752 Monterey Ln., Vista 92083

**SAN DIEGUITO GESNERIAD CLUB**

Pres: Mrs. Roman Shore 433-3532  
 4471 Estada Dr., Oceanside 92054

**SOUTHWEST HEMEROCALLIS SOCIETY**

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Pres: Mr. Sanford Roberts 443-7711

15011 Oak Creek Rd., El Cajon 92021

**SOUTHWESTERN GROUP, JUDGES' COUNCIL, CALIFORNIA GARDEN CLUBS, INC.**

1st Wed., Casa del Prado, 10:30 a.m.  
 Pres: Mrs. William F. Green 488-3665

1340 Loring St., S.D. 92109

**UNIVERSITY CITY GARDEN CLUB**

Pres: Mrs. Siva Elliott 271-0850  
 10771 Black Mountain Rd., S.D. 92126

**VILLAGE GARDEN CLUB OF LA JOLLA**

4th Thurs., La Jolla United Methodist,  
 6063 La Jolla Blvd., La Jolla, 1:00 p.m.

Pres: Mrs. Harley Cope 459-7688

6608 Avenida Bizarro, La Jolla 92037

**Other Garden Clubs****AMISTAD CLUB OF LA JOLLA****GARDEN SECTION**

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 5588 Soledad Mtn. Rd., La Jolla 92037

**BERNARDO GARDENERS CLUB**

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 17528 Plaza Otonal, S.D. 92128

**BLOOMING AFRICAN VIOLET CLUB**

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 212 Bright Creek Ln., Oceanside 92054

**BONITA VALLEY GARDEN CLUB**

Pres: Mrs. Dolores Charles 479-8266  
 3965 Bonita View Dr., Bonita 92002

**BRIDGE & BAY GARDEN CLUB**

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 3612 Fairlomas Rd, National City 92050

**CHULA VISTA ROSE SOCIETY**

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 1053 Summer Ct., El Cajon 92021

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## THE VINE

The vine, *Vitis vinifera*, has been considered a sacred plant for many centuries. Believed to have originated in the Caucasus, it was known in ancient Egypt and was one of the Biblical symbols of peace and plenty. In ancient Syria and Judea, particularly, vines were trained in fig trees, which explains the Biblical proverb: "They shall sit every man under his vine and his fig tree, and none shall make them afraid."

A magnificent sculpture of The Vine created in gold with fruit of precious stones adorned the east wall of the Temple of Jerusalem. After the war against Judea and the capture of Jerusalem, the Roman general, later Emperor, Titus Flavius Vespasianus carried this sculpture to Rome among his spoils of war.

The vine was one of the earliest signs used for the Redeemer, and later it became a sacred token in the catacombs. Under Constantine the Great, it became the sole symbol of the Christian faith.

Long before the birth of Christianity grapes were considered a good luck gift and that the plant brought luck and strength to its owner. In astrology it was the plant of the sun and its leaves stood for mirth and intoxication, which is not surprising since the Romans had dedicated them to Bacchus and Dionysius.

Although the grape seems to have been the first vine widely used symbolically, there are many others that have significant meanings. Ivy for instance, indicates eternal friendship, the morning glory is the Japanese symbol of mortality and a wild vine is emblematic of poetry and imagination.

